

*please enter  
edit change  
1/3/2006*

**IN THE SPECIFICATION:**

Please amend the specification as follows.

Please replace the paragraph from page 20, line 32, to page 21, line 4, with the following amended paragraph:

The synchronization coordinator ~~Synchronization coordination~~ 290 takes the synchronization information from the multiple correlation arms and combines and coordinates the data to ensure that the multiple correlation arms work together to ensure quality of service. The synchronization ~~Synchronization~~ coordinator ~~777~~ 290 sends control signals back to the synchronization processors (~~refs~~) 240, 280 and timing controllers (~~refs~~) 250, 285 as a means of directing the operation of the various arms.

**IN THE SPECIFICATION:**

Please replace the paragraph running from page 1, line 5, to page 2, line 23, of the specification with the following:

The present document contains subject matter related to that disclosed in commonly owned, co-pending application Serial No. 09/209,460 filed December 11, 1998, entitled ULTRA WIDE BANDWIDTH SPREAD-SPECTRUM COMMUNICATIONS SYSTEM (Attorney Docket No. 10188-0001-8); Serial No. 09/633,815 filed August 7, 2000, entitled ELECTRICALLY SMALL PLANAR UWB ANTENNA (Attorney Docket No. 10188-0005-8); Application Serial No. 09/563,292 filed May 3, 2000, entitled PLANAR ULTRA WIDE BAND ANTENNA WITH INTEGRATED ELECTRONICS (Attorney Docket No. 10188-0006-8); Application Serial No. 60/207,225 filed May 26, 2000, entitled ULTRA WIDE BAND <sup>now U.S. patent 6,351,246</sup> COMMUNICATION SYSTEM AND METHOD (Attorney Docket No. 192408US8PROV); Application Serial No. ~~XX/XXX,XXX~~ 09/685,198, filed October 10, 2000, entitled ANALOG SIGNAL SEPARATOR FOR UWB VERSUS NARROWBAND SIGNALS (Attorney Docket No. 192504US8); Application Serial No. ~~XX/XXX,XXX~~ 60/238,466, filed October 10, 2000, entitled ULTRA WIDE BANDWIDTH NOISE CANCELLATION MECHANISM AND METHOD (Attorney Docket No. 193517US8); Application Serial No. 60/217,099 filed July 10, 2000, entitled MULTIMEDIA WIRELESS PERSONAL AREA NETWORK (WPAN) PHYSICAL LAYER SYSTEM AND METHOD (Attorney Docket No. 194308US8PROV); Application Serial No. ~~XX/XXX,XXX~~ 09/685,203, filed October 10, 2000, entitled SYSTEM AND METHOD FOR BASEBAND REMOVAL OF NARROWBAND INTERFERENCE IN <sup>now U.S. patent 6,834,073</sup> ULTRA WIDE BAND SIGNALS (Attorney Docket No. 194381US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,197, filed October 10, 2000, entitled MODE CONTROLLER FOR

SIGNAL ACQUISITION AND TRACKING IN AN ULTRA WIDEBAND

COMMUNICATION SYSTEM (Attorney Docket No. 194588US8); Application Serial No. ~~XX/XXX,XXX~~ <sup>now U.S. patent 6,965,630</sup>

~~XX/XXX,XXX~~ 09/684,400, filed October 10, 2000, entitled ULTRA WIDEBAND

COMMUNICATION SYSTEM, METHOD, AND DEVICE WITH LOW NOISE PULSE

FORMATION (Attorney Docket No. 195268US8); Application Serial No. ~~XX/XXX,XXX~~ <sup>now U.S. patent 6,735,238</sup>

09/685,195, filed October 10, 2000, entitled ULTRA WIDE BANDWIDTH SYSTEM AND

METHOD FOR FAST SYNCHRONIZATION (Attorney Docket No. 195269US8); Application <sup>now U.S. patent 6,925,108</sup>

Serial No. ~~XX/XXX,XXX~~ 09/684,401, filed October 10, 2000, entitled ULTRA WIDE

BANDWIDTH SYSTEM AND METHOD FOR FAST SYNCHRONIZATION USING SUB

CODE SPINS (Attorney Docket No. 195272US8); Application Serial No. ~~XX/XXX,XXX~~ <sup>now U.S. patent 6,967,923</sup> filed

October 10, 2000, entitled ULTRA WIDE BANDWIDTH SYSTEM AND METHOD FOR

FAST SYNCHRONIZATION USING MULTIPLE DETECTION ARMS (Attorney Docket No.

195273US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,199, filed October 10, 2000,

entitled A LOW POWER, HIGH RESOLUTION TIMING GENERATOR FOR ULTRA-WIDE

BANDWIDTH COMMUNICATION SYSTEMS (Attorney Docket No. 195670US8); <sup>now U.S. patent 6,975,665</sup>

Application Serial No. ~~XX/XXX,XXX~~ 09/685,202, filed October 10, 2000, entitled METHOD

AND SYSTEM FOR ENABLING DEVICE FUNCTIONS BASED ON DISTANCE

INFORMATION (Attorney Docket No. 195671US8); Application Serial No. ~~XX/XXX,XXX~~

09/685,201, filed October 10, 2000, entitled CARRIERLESS ULTRA WIDEBAND WIRELESS

SIGNALS FOR CONVEYING APPLICATION DATA (Attorney Docket No. 196108US8); <sup>now U.S. patent 6,505,032</sup>

Application Serial No. ~~XX/XXX,XXX~~ 09/685,205, filed October 10, 2000, entitled SYSTEM

AND METHOD FOR GENERATING ULTRA WIDEBAND PULSES (Attorney Docket No.

197023US8); Application Serial No. ~~XX/XXX,XXX~~ 09/684,782, filed October 10, 2000,

entitled ULTRA WIDEBAND COMMUNICATION SYSTEM, METHOD, AND DEVICE

*now U.S. patent 6,859,526*

WITH LOW NOISE RECEPTION (Attorney Docket No. 197024US8); and Application Serial

No. ~~XX/XXX,XXX~~ 09/685,200, filed October 10, 2000, entitled LEAKAGE NULLING

RECEIVER CORRELATOR STRUCTURE AND METHOD FOR ULTRA WIDE

*now U.S. patent 6,937,646*

BANDWIDTH COMMUNICATION SYSTEM (Attorney Docket No. 1541.1001/GMG), the

entire contents of each of which being incorporated herein by reference.

Please replace the paragraph on page 22, lines 10-22, of the specification with the following:

After phase acquisition, the received signal may be tracked as a means of maintaining synchronization as in steps 304 and 308 of Figure 5. This can be done by methods described in, for example, co-pending US patent application entitled "ULTRA WIDE BANDWIDTH SYSTEM AND METHOD FOR FAST SYNCHRONIZATION," serial number ~~XX/XXX,XXX~~  
*now U.S. patent 6,925,108*  
09/685,195, filed concurrently with the present document and having common inventorship as with the present document, the contents of which being incorporated herein by reference. As discussed in the above referenced co-pending patent, many embodiments for performing phase tracking are possible in the current invention. These tracking methods may employ more than one mixer, or just the on-time term from a single mixer as illustrated in the embodiments of the above referenced co-pending patent. During the process of tracking incremental phase errors, a method may be employed for making frequency adjustments to the timing generator 7 in Figure 1A. Various embodiments involving frequency acquisition are possible as discussed in the above co-pending patent.

Please replace the paragraph on page 30, lines 2-9, of the specification with the following:

In step 1520, the phase offset,  $\phi$ , is incremented by  $z_j$  from the initial phase offset  $\theta$ , which may be random, such that  $\phi = \theta + z_j$ . In step 1530, the correlation estimate for the current phase offset,  $K$ , is computed.  $K$  is then used to compute the SNR parameter  $R$ . This can be done by methods described in, for example, co-pending US patent application entitled "MODE

AB CONTROLLER FOR SIGNAL ACQUISITION AND TRACKING IN AN ULTRA

WIDEBAND COMMUNICATIONS SYSTEM," serial number ~~XXXXXX,XXX~~ <sup>now U.S. Patent 6,965,630</sup> 09/685,197,

filed concurrently with the present document and having common inventorship as with the present document, the contents of which being incorporated herein by reference.